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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,850	11/25/2003	Petrus T. de Koning	D/A3139	6944

7590 11/15/2007
Patent Documentation Center
Xerox Corporation
Xerox Square 20th Floor
100 Clinton Ave. S.
Rochester, NY 14644

EXAMINER

ZHENG, JACKY X

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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11/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,850

Applicant(s)

DE KONING, PETRUS T.

Examiner

Jacky X. Zheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 17-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on November 25, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/20/05 & 11/25/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial office action based on the application filed on September 5, 2007.
2. **Claims 1-16** are pending.
3. **Claims 17-24** are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species.
4. Applicant's election with traverse of **claims 1-16** in the reply filed on September 5, 2007 is acknowledged. The traversal is on the ground(s) that Figure 1 and Figure 2 are related to the same hardware. This is not found persuasive because Figure 1 and Figure 2 are clearly referring to different embodiments. As illustrated in Figure 2, which particularly requires "a lower pane 60", which is clearly not required by Figure 1. In addition, as evidenced by Applicant's disclosure, in Paragraph [0014], reciting "In one possible embodiment, the pane 50 can be in contact with lower pane 60 ... Lower pane 60 acts as a dust cover for the scanner bar 32...", which clearly indicating the illustration of Figure 2 to be referring to a different embodiment. For *at least* the reasons indicated above, the requirement is still deemed proper due to an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g. searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely applicable to another species; and/or the species are likely to raise different non-prior art issues under U.S.C. 101 *and/or* 35 U.S.C 112, first paragraph. Applicant is also reminded regarding the elected claims to be in compliance with 35 U.S.C 112, first paragraph with respect to the elected specie (or Figure) for supports.

Thus, the requirement is still deemed proper and is therefore made **FINAL**.

5. This application contains claims 17-24 drawn to an invention nonelected with traverse in the reply filed on September 5, 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 7, 18, 10-11 and 13-14** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. The term "effectively" in claims 7 and 18 is a relative term which renders the claim indefinite. The term "effectively" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

9. Claims 10-11 and 13-14 recite the limitation of "the pane". Such a limitation has not been *explicitly* depicted with sufficient descriptions in the instant claim. It is unclear whether "the pane" is referring to "a light-transmissive pane (the first pane)", second pane, or etc. The scope of such a limitation is unable to be determined, further clarification is required.

10. The phrase "optically equivalent" in claim 15 is a relative phrase, as such a limitation has not been explicitly depicted with further or sufficient descriptions in instant claim, which renders

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the claim indefinite. The phrase "optically equivalent" is not defined by the claim and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. **Claims 1-2, 4 and 6-16** are rejected under 35 U.S.C. 102(e) as being anticipated by **Suzuki (Patent No. 6,738,167)**.

With regard to claim 1, the claim is drawn to an apparatus for recording images on sheets, comprising: an image receptor, disposed in a main body of the apparatus (*see Suzuki, i.e. Figure 1 – 11, "CCD sensor"*); a document handler, for conveying each of a set of sheets past the image receptor, the document handler being movably mounted relative to the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 28, "Automatic Document Feeder"*); and a light-transmissive pane fixedly mounted relative to the document handler, and operatively disposed between a sheet and the image receptor when the document handler is moving the sheet past the image receptor (*see Suzuki, i.e. Figure 1 – 13, "Reading Window"*).

With regard to claim 2, the claim is drawn to the apparatus of claim 1, further comprising a backing member within the document handler, adjacent the pane (*see Suzuki, i.e. Figure 1 – 37, “Conveying Roller”*).

With regard to claim 4, the claim is drawn to the apparatus of claim 2, wherein the backing member is a backing roll (*see Suzuki, i.e. Figure 1 – 37, “Conveying Roller”*).

With regard to claim 6, the claim is drawn to the apparatus of claim 1 further comprising means for covering the image receptor when the document handler is positioned away from the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 13, “Reading Window”; and in consideration of Paragraph [0014] in the specification of instant application; and/or the exterior casing represented by the “rectangular box”, labeled with “11” in Figure 1*).

With regard to claim 7, the claim is drawn to the apparatus of claim 6, the covering means including means for moving the image receptor to an effectively covered position when the document handler is positioned away from the main body of the apparatus (*see Suzuki, i.e. Column 2, lines 60-63, “a drive pulley”*).

With regard to claim 8, the claim is drawn to the apparatus of claim 1, wherein the main body of the apparatus includes a main platen (*see Suzuki, i.e. Figure 1 – 12 “Document Glass”*), and further comprising means for moving the image receptor under the main platen in response to the document handler being positioned away from the main body of the apparatus (*see Suzuki, i.e. Column 2, lines 60-63, “a drive pulley”, “first carriage 24”, “second carriage 26”*).

With regard to claim 9, the claim is drawn to the apparatus of claim 1, further comprising a second pane operatively disposed in front of the image receptor, the second pane

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being mounted within the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 “Document Glass”*).

With regard to claim 10, the claim is drawn to the apparatus of claim 9, wherein the second pane is disposed a predetermined distance from the pane when the document handler is positioned against the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 “Document Glass”, the figure clearly illustrates “the second pane (or main platen)” (Figure 1 – 12) disposed at a predetermined distance from “the pane” (Figure 1 – 13))*).

With regard to claim 11, the claim is drawn to the apparatus of claim 9, wherein the second pane contacts the pane when the document handler is positioned against the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 & 13 “Document Glass” & “Reading Window”*).

With regard to claim 12, the claim is drawn to the apparatus of claim 1, the image receptor including a photosensitive chip (*see Suzuki, i.e. Figure 1 – 11, “CCD Sensor”*).

With regard to claim 13, the claim is drawn to the apparatus of claim 1, wherein the main body of the apparatus includes a main platen, and wherein the main platen is optically equivalent to the pane, relative to the image receptor when the document handler is positioned against the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 “Document Glass”*).

With regard to claim 14, the claim is drawn to the apparatus of claim 1, wherein the main body of the apparatus includes a main platen, and wherein the main platen and the pane are substantially co-planar when the document handler is positioned against the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 “Document Glass” and Figure 1 – 13, “Reading Window” are clearly illustrated to be “substantially co-planar”*).

With regard to claim 15, the claim is drawn to the apparatus of claim 1, further comprising a main platen in the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 “Document Glass”*), a lower pane adjacent the pane (*see Suzuki, i.e. Figure 1 – 13*), and wherein the main platen is optically equivalent to the pane in combination with the lower pane, relative to the image receptor when the document handler is positioned against the main body of the apparatus (*see Suzuki, i.e. column 2, lines 53-57, “image reflected light from a document placed on the document glass 12 or a document passed on the reading windows 13 is projected to CCD sensor by an optical system...”*).

With regard to claim 16, the claim is drawn to the apparatus of claim 1, further comprising a main platen in the main body of the apparatus, a lower pane adjacent the pane, and wherein the main platen and the pane in combination with the lower pane are substantially coplanar when the document handler is positioned against the main body of the apparatus (*see Suzuki, i.e. Figure 1 – 12 & 13 “Document Glass” & “Reading Windows”, disposed at “substantially coplanar” on the body*).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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14. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (Patent No. 6,738,167) as applied to claims discussed above, and further in view of Nakano et al. (U.S. Patent No. 6,874,778).

Suzuki does not *explicitly* disclose the limitation of “means for urging the backing member against the pane” and “the backing member includes resilient properties”. Although such limitations are commonly known by one of ordinary skill in the art, for purposes of advancing the prosecution, illustrations and discussions of these limitations will also be discussed as following over the prior art, Nakano et al.

Nakano et al. discloses an invention relates to a sheet feeding apparatus, specially disclose “a sheet feeding roller” (see Nakano et al., *i.e. Figure 1 – 2*), further having “roller rubber” (see Nakano et al., *i.e. Figure 1 – 2a*), which has “the resilient property”; and also discloses “a press-contact spring” (see Nakano et al., *i.e. Figure 1 – 4*) as a mean for “urging” the roller to make contact with the sheets.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Suzuki to include the limitation of “means for urging the backing member against the pane” and “the backing member includes resilient properties” taught by Nakano et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Suzuki by the teachings of Nakano et al. to the limitation of “means for urging the backing member against the pane” and “the backing member includes resilient properties” taught by Nakano et al. to ensure better or proper transporting of the sheets.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A. Takida et al. (U.S. Patent No. 6,618,575) disclose an automatic document feeder with a conveying roller and an image reader.
- B. Mui et al. (U.S. Patent No. 7,251,063) disclose an automatic document feeder.
- C. Wenthe, Jr. et al. (U.S. Patent No. 5,488,464) disclose a constant velocity transport for electronic document imaging.
- D. Murakami (U.S. Patent No. 5,912,747) disclose a scanning device, which scan a document in a reverse moving action.
- E. de Koning et al. (U.S. Pub. No. 2002/0135120 A1) disclose a constant force sheet feeder.
- F. Mui et al. (U.S. Pub. No. 2002/0176122) disclose an apparatus and method for calibrating a scanner with a document feeder.
- G. Honbo et al. (U.S. Pub. No. 2002/0080429 A1) disclose an image reading apparatus and method of setting reading position.
- H. Chen (U.S. Pub. No. 2002/0033968 A1) discloses a duplex scanner capable of calibrating two-sided documents.
- I. Shishido (U.S. Pub. No. 2003/0081275 A1) discloses an image reading apparatus for reading a document image used in image scanner, copier or facsimile machine.
- J. Kinoshita (U.S. Pub. No. 2002/0164175 A1) discloses an image forming apparatus.
- K. Okada (U.S. Patent No. 5,953,574) discloses a sheet feeding apparatus and image forming apparatus.

- L. Tokunoh (U.S. Patent No. 5,515,153) discloses an image forming apparatus with an automatic document feeder having a document-transporting belt.
- M. Nagao et al. (U.S. Patent No. 5,338,018) disclose an automatic document feeder.
- N. Itoh (U.S. Patent No. 5,734,483) discloses an image scanner having contact-type image sensor.
- O. Itoh (U.S. Patent No. 5,610,731) discloses an image scanner having contact-type image sensor movable under automatic document feeder.
- P. de Koning et al. (U.S. Patent No. 6,595,512) disclose a constant force sheet feeder.
- Q. Nakano et al. (U.S. Patent No. 6,874,778) disclose a sheet feeding apparatus and image forming apparatus provided with same.
- R. Anzai (U.S. Pub. No. 2002/0057465 A1) discloses an image input apparatus.
- S. Sekine (U.S. Pub. No. 2002/0135821 A1) discloses an automatic document feeder and image forming apparatus.
- T. Watanabe et al. (U.S. Pub. No. 2004/0004320 A1) disclose an automatic document feeding apparatus and document reading apparatus.
- U. Hattori et al. (U.S. Pub. No. 2004/0004319 A1) disclose an automatic document feeder and image processing apparatus.
- V. Kobayashi et al. (U.S. Pub. No. 2003/0011121 A1) disclose a document feeding apparatus and document reading apparatus.
- W. Watanabe et al. (U.S. Pub. No. 2004/0065991 A1) disclose an automatic document feeding apparatus.
- X. Hsiao et al. (U.S. Patent No. 2003/0090052) disclose a document feeding apparatus.

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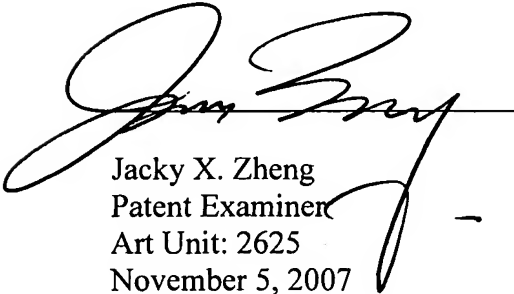
- Y. Iwago et al. (U.S. Pub. No. 2004/0062579) disclose a paper discharge tray.
- Z. Nakagawa et al. (U.S. Pub. No. 2003/0026633 A1) disclose a sheet feeding apparatus, image scanning apparatus and image forming apparatus.
- AA. Nakagawa et al. (U.S. Pub. No. 2003/0026633 A1) disclose an image feeding apparatus.
- BB. Sugeta et al. (U.S. Pub. No. 2004/0125412) disclose an image reading apparatus.
- CC. Kanno (U.S. Pub. No. 2004/0047007 A1) discloses a document reading apparatus.
- DD. Kobayashi et al. (U.S. Patent No. 6,837,488) disclose a document feeding apparatus and document reading apparatus.
- EE. Prebola et al. (U.S. Patent No. 4,849,788) disclose an automatic dual mode document registration and edge guide.
- FF. Watanabe et al. (U.S. Patent No. 7,021,618) disclose an ADF.
- GG. Yamada (U.S. Patent No. 5,328,163) discloses a recording sheet feeding device.
- HH. Wada et al. (U.S. Patent No. 6,027,109) disclose a document feeder.
- II. Mui et al. (U.S. Patent No. 6,947,187) disclose an apparatus and method for calibrating a scanner with a document feeder.
- JJ. Sheng et al. (U.S. Patent No. 6,512,602) disclose a guide for paper feeder.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacky X. Zheng whose telephone number is (571) 270-1122. The examiner can *normally* be reached on Monday-Friday, 7:30 a.m.-5p.m., Alt. Friday Off.

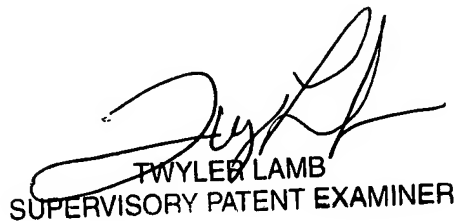
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jacky X. Zheng
Patent Examiner
Art Unit: 2625
November 5, 2007



TWYLER LAMB
SUPERVISORY PATENT EXAMINER